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ANALYSIS OF HOME KITCHENS AS THE BASIS FOR PLANNING  
SOME EFFECTIVE LEARNING EXPERIENCES FOR SECONDARY PUPILS  
IN THE AREA OF MANAGEMENT

by

Valeria Jackson Shuford

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*Josephine Kramer*  
Adviser

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## CHAPTER I

### INTRODUCTION

The need for teaching better practices of management on the secondary level is great. Havighurst<sup>1</sup> lists managing a home as one of the developmental tasks of early adulthood. He said:

A developmental task is a task which arises at or about a certain period in the life of the individual, successful achievement of which leads to his happiness and to success with later tasks, while failure leads to unhappiness in the individual, disapproval by the society, and difficulty with later tasks.<sup>2</sup>

The pupils need to be given an opportunity to use at home the good management practices they have learned at school. In a study made by a group of teachers in Ohio, this statement was made:

For normal development, the adolescent needs a sense of achievement. She values social approval. She enjoys helping to set goals for her activities and seeing the progress she is making toward the goals set. If in addition to the achievement, she secures approval of her classmates, teachers and parents, she places greater importance on the goals and works more willingly to achieve them. Management principles may seem uninteresting to her and too abstract to comprehend. She needs to experience satisfying results from good management practices, and to have these interpreted to her as they apply to her daily living at home and in school and in terms of her own sense of values.<sup>3</sup>

Home visits are important to gain information. Cushman says that "homes are the best textbooks of home management, a reservoir of

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<sup>1</sup>Robert J. Havighurst, Developmental Tasks and Education (New York: Longmans, Green and Company, 1952), p. 77.

<sup>2</sup>Ibid., p. 2

<sup>3</sup>High School Teachers Improve Management Practices in Food Classes. Division of Vocational Education, Home Economics, November, 1951. Columbus 15, Ohio: State Department of Education, 1951. p. 32.

source material invaluable and inexhaustible."<sup>4</sup> Spafford stressed the importance of home visiting in this statement:

A functional program can be developed only as the teacher knows the local situation. The home-economics teacher needs to know a representative group of homes as soon as possible. Her work will be increasingly effective as she extends both the number of homes she knows and the scope of her knowledge.<sup>5</sup>

The investigator accepted the beliefs that young adults need to develop an ability to manage homes and that the home is the best source of information. She chose kitchens and management in kitchens as the areas on which she wished to concentrate.

The purpose of this study was to determine the status, kind, and use of kitchens in the homes of twenty-eight ninth grade pupils enrolled in homemaking classes in Flat Rock High School, and to utilize these data as a basis for suggesting some effective home and class experiences related to management in kitchens. Flat Rock High School is located in a rural community near Mount Airy, Surry County, North Carolina. The income of about half the families comes from farming; that of the other half, from industry.

To secure the information needed for this study two check sheets were devised. One was used by the teacher after she visited the home of each girl in the class to record her informal observations of the kitchens in the homes of the pupils (Appendix, p.68). The teacher's check sheet had to do with the appearance, sanitation, adequacy of work areas, adequacy and efficiency of eating and storage areas, and general arrangement. The other check sheet was used by the girls in class to describe the kitchens in their homes (Appendix, p.70). Their check sheet asked questions

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<sup>4</sup>Ella M. Cushman, Management in Homes (New York: The MacMillan Company, 1945), p. 256

<sup>5</sup>Ivot Spafford, A Functioning Program of Home Economics (New York: John Wiley and Sons, Inc., 1940), p. 114.



about activities carried on in the kitchens, water supply, arrangement for care of garbage, method of doing laundry, regulation of light, kind of large equipment, storage, and location of work centers.

Tabulation and interpretation of these findings have been made by the investigator. From these data suggestions for effective learning experiences related to management in kitchens have been formulated.



## CHAPTER II

### REVIEW OF LITERATURE

What is the value of visiting the homes of pupils? Each teacher is confronted with this question. A vocational bulletin from the Office of Education stated, "Home visiting is essential if teachers are to understand needs of pupils and the limitations they face in solving problems relating to their homes."<sup>1</sup> Another Office of Education bulletin emphasized the importance of visiting by stating: "The teacher who is planning a course must know the individual needs of her pupils. She must also know the kinds of homes from which they come and something of the community life."<sup>2</sup> It went on to say that:

Knowing the size of the home, kind of equipment used, standards of maintenance, and composition of the family is of great help to the teacher in planning a course related to everyday living problems of pupils and their families.<sup>3</sup>

In discussing visiting and home experiences this statement was made:

An important part of the teacher's work, therefore is to help the pupil approach her home activities as problems which can be solved by the methods practiced at school. Home activities offer opportunities to test skills and managerial ability.<sup>4</sup>

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<sup>1</sup>Home, School and Community Experiences in the Homemaking Program. Vocational Division Bulletin No. 252, Home Economics Education Series No. 29. Washington, D. C.: U. S. Department of Health, Education, and Welfare, Office of Education, 1954. p. 5.

<sup>2</sup>Homemaking Education in Secondary Schools of the U. S., Federal Security Agency, Office of Education. Washington, D. C.: Government Printing Office, 1947, p. 10.

<sup>3</sup>Loc. cit.

<sup>4</sup>Ibid., p. 18.

The importance of home practices and projects was stated by Williamson and Lyle as follows:

It is evident that the school cannot provide the human element of family life. Opportunity is also limited in the classroom by expense and by the necessity for having many pupils work together, so that no one girl or boy has opportunity to carry as much responsibility as would be possible at home.<sup>5</sup>

Spafford made this statement:

The nature and extent of the contact of home-economics teachers with real homemaking problems will influence greatly their teaching. Standards of work impossible to maintain in the home, a quality of materials used in class which families cannot afford, or a laboratory way of teaching single activities out of relationship to the broader problems of living will interfere with developing a functional program.<sup>6</sup>

The Office of Education made the following statement:

The teacher who recognizes the conditions existing in the homes should be able to adapt classroom instruction and guide pupils in choosing and developing experiences in the classroom and in the home which will make a definite contribution to the improvement of home conditions.<sup>7</sup>

Four studies of pupils' needs and interests. A study of home visits as one way of building a more effective homemaking program was made by Edith Councilman.<sup>8</sup> She recognized the need for home visiting but felt that she was not gaining enough value from her previous methods

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<sup>5</sup>Maude Williamson and Mary Stewart Lyle, Homemaking Education in the High School (New York: Appleton-Century-Crofts, Inc., 1954), p. 213.

<sup>6</sup>Ivor Spafford, A Functioning Program of Home Economics (New York: John Wiley and Sons, Inc., 1940), p. 87.

<sup>7</sup>Vocational Division Bulletin No. 252, op. cit., p. 5.

<sup>8</sup>Mary Edith Councilman, "The Home as a Means of Building a More Effective Homemaking Program," (Unpublished Master's thesis, The Consolidated University of North Carolina, Greensboro, 1951), p. 2.

of home visiting. She decided to make her home visits more meaningful by recording for future reference ideas gained during home visits such as: pupil's statements as to her home and personal responsibilities, comments and suggestions of mother and other family members, and the teacher's own personal observations. Visits to eleven third-year homemaking pupils of Sumner High School, Guilford County, Greensboro, North Carolina, were made near the beginning of the school year as a means of getting acquainted in a new community. Information obtained informally, as it came up naturally in conversation, was recorded after each visit. This conforms with what Hatcher and Andrews recommend: "At no time should a teacher take written notes, although she should jot down her impressions and the information that she has obtained while the visit is fresh in her mind."<sup>9</sup>

For recording this information, Councilman prepared one form for each pupil with space for recording under the seven homemaking areas the problems of which the girl, the family, and the teacher were aware. She also prepared a second set of forms, one for each subject matter area, to which information about the problems of all the pupils in each area were transferred. For example, all the information pertinent to the housing area was assembled from the records of visits to the eleven homes. The same was done for the areas of clothing, food, child care, relationships, health, and consumer economics. Councilman supplemented this record by information gained through contacts with the pupil at school.

These findings were to be used as a way of developing the homemaking program into a stronger one. Units on clothing and child care were

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<sup>9</sup>Hazel M. Hatcher and Mildred E. Andrews, The Teaching of Homemaking, (Cambridge: The Riverside Press, 1945), p. 204.

developed and ideas suggested for the other units. In developing her units, Councilman considered the needs of the individual girl.

Studies similar to this were made by Deischer and Martin. These concentrated chiefly on how home visits were made, but also gave some attention to the use of the information obtained in developing the home-making program. Deischer<sup>10</sup> made her study to discover, in part, the kinds of information vocational homemaking teachers of Iowa believe they secured through home visits and to what extent and in what ways these teachers were making use of information and experiences gained through home visits. Questionnaires on home visiting were filled out by 135 vocational teachers at their annual conference. In order to gain more information, Deischer interviewed 31 teachers.

Martin's<sup>11</sup> study was to find out how vocational home economics teachers of Alabama prepared to make visits, made the visits, secured the information through home visits and made use of this information in teaching. She asked a group of 187 vocational home economics teachers to fill out a datum sheet answering questions on home visits. To gain further information she interviewed during regular supervisory visits, a group of 22 teachers and made 57 home visits with these teachers. From both groups of teachers, Martin<sup>12</sup> obtained suggestions for changes in the various units to be taught.

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<sup>10</sup>Mildred E. Deischer, "Practices of Iowa Vocational Teachers in Relation to Home Visits," (Unpublished Master's thesis, Iowa State College, Ames, 1940), p. 12, 21, 36.

<sup>11</sup>Mary Love Martin, "Home Visiting Practices of Alabama Vocational Home Economics Teachers," (unpublished Master's thesis, Iowa State College, Ames, 1942), p. 7.

<sup>12</sup>Ibid., p. 26-30.

Nelson<sup>13</sup> also wanted to use the home experiences of girls as a basis for developing a better homemaking program. She used different sources of information about the home experiences of the girls. She obtained a description of the community of DePue, Illinois, from the town clerk, the school nurse, and the nurse for a zinc plant located in the town. She added information from school records and her own observations. To obtain more data on home conditions, needs, and interests, Nelson gave a questionnaire to 108 girls in grades 9 to 12, inclusive. It was hoped that these girls felt free to answer all questions honestly because they were not required to sign the questionnaire. Information from all these sources helped the teacher in planning a better homemaking program by "discovering areas in which a more significant contribution to individual adjustment and better home living can be made."<sup>14</sup>

Nelson found that 73 per cent of the families in the community were dependent upon the zinc plant for a means of livelihood. Thirty-seven per cent of these worked only four days a week and 34 per cent five. She found that 53 per cent of the families had only one wage earner. About nine per cent of the fathers were non-citizens, some having been encouraged to come there to work in the zinc plant. The majority of the wage earners received from \$85 to \$100 per month.<sup>15</sup> Nelson felt that even though "present day home economics is not centered mainly in skills"<sup>16</sup> a girl coming from a large family, a low income family, and/or a family of foreign extraction needed more training in basic skills to become a better family member.<sup>17</sup>

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<sup>13</sup>Elvera H. Nelson, "A Study of Home Experiences of Girls in DePue High School as a Basis for a Program for Teaching Homemaking," (unpublished Master's thesis, State University of Iowa, Iowa City, 1941), p. 16-17.

<sup>14</sup>Ibid., p. 16.

<sup>15</sup>Ibid., p. 18

<sup>16</sup>Ibid., p. 25.

<sup>17</sup>Loc. cit.



Clothing in all of its aspects is a subject in which most girls are interested. Councilman, in developing her clothing unit, studied the problems listed after home visits and contacts at school. Many of the pupils expressed a need or desire to learn to sew. Their other clothing problems were quite varied. To meet these needs, the teacher decided to form the unit into two parts: construction, and clothing activities other than construction. To get more detailed information on wants and needs of the pupils, Councilman prepared a check-list to be filled out by the girls stating the garments they would like to make, the new construction steps they would like to learn, and first, second, and third choice of other topics they would like to study.<sup>18</sup>

The construction part of the unit lasted four weeks. The pupils had expressed various attitudes toward sewing. One pupil assumed responsibility for making the clothes of her smaller sisters. Another pupil's mother said she liked to sew but she did not have time to sew or to teach her daughter how, so she wanted the daughter to learn at school; the father also wanted the girl to learn to sew. One girl, who worked on the second shift in the mill, did the family ironing. She did not have time to sew at home and had not learned to sew after two years of homemaking.

The girls were "pretested, allowed to choose the garment they wished to make, listed the new problems involved in the making of the garment, constructed the garment, scored the completed garment, and were allowed to wear the garment as soon as it was completed and were not required to model it in a fashion show."<sup>19</sup>

Some of the girls who had disliked sewing at the beginning of the year learned to like to sew.<sup>20</sup>

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<sup>18</sup>Councilman, op. cit., p. 4

<sup>19</sup>Ibid., p. 41.

<sup>20</sup>Ibid., p. 19.

Clothing activities other than construction lasted two weeks. The pupils had a wide variety of problems. One pupil who did all the family ironing, chose short cuts in ironing as her topic. Another was an experienced sewer; for her demonstration she made a white topper, using it to demonstrate pressing techniques and a pressing center. Another chose a report on the laundering of wool and rayon, and short cuts in making a pair of pajamas. One girl, who took the responsibility for her own clothes and those of her younger sisters, was asked by another pupil to dye her jersey blouse which was in poor condition. Another, whose right hand was off at the wrist, chose care of the machines for her topic; in this she demonstrated oiling the machine and ways of removing oil and other stains from garments. The girl who worked in a mill planned to buy a sewing machine for her mother; she studied the selection of sewing machines. Points to look for in ready-made garments, especially those which cannot be or seldom are made, was the report of one pupil who hated to sew. One girl worked in the dime store and bought most of her clothes; altering ready-made garments was her topic. Another pupil, wanting to sew more, made a blouse and an apron, using various sewing machine attachments.<sup>21</sup>

During the two weeks, each girl chose a topic for an oral report or demonstration. In order to get a wide range of subject matter, Councilman suggested topics based on each girl's choices expressed on the record of the home visit and in the clothing unit check-list. The suggestion was, of course, subject to the approval of the girl. The teacher had collected pamphlets and illustrative material on each topic

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<sup>21</sup>Ibid., p. 6-18



for the use of the pupils. They were given a week to prepare the report, and a week to make oral reports to the class. Each girl was allotted thirty minutes for her report. Councilman said, "The individual reports and demonstrations helped the girls with personal poise as well as being able to cover a wider range of the clothing information."<sup>22</sup>

Deischer found that in clothing, the teachers indicated that longer units were needed because the mothers worked so hard they did not have time to do sewing or teach the girls to sew.<sup>23</sup>

Martin found in clothing units that the teachers had made only a few changes due to findings during home visits. More time was spent in construction of garments, planning and making an afternoon dress, and problems in care and renovation of clothing.<sup>24</sup>

Nelson found in the area of clothing that 86 per cent of the girls did not know how much money was spent on their clothes each year. Fifty per cent of the girls did their own buying. About 50 per cent indicated that they had trouble buying correct size garments, so Nelson felt they needed skills in altering clothing.<sup>25</sup> Some emphasis on art in clothing would be of value in a clothing unit, since style was listed as the chief consideration in garment selection. Skill in clothing construction was needed because the girls could have more clothes if they learned how to sew; adequate clothes also helped the girl "to maintain her poise and social prestige among associates."<sup>26</sup>

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<sup>22</sup>Ibid., p. 41.

<sup>23</sup>Deischer, op. cit., p. 62.

<sup>24</sup>Martin, op. cit., p. 96.

<sup>25</sup>Nelson, op. cit., p. 25.

<sup>26</sup>Loc. cit.

Suggestions for foods unit. Food study in the homemaking curriculum should be related to the needs of the pupils. During an Ohio study of improving management practices in food classes, a group of teachers said:

It is a commonly accepted fact that the planning, preparing and serving of meals demands more application of good management principles than does the preparation of a single dish. The meal quite naturally furnishes greater motivation to use time, energy and money to good advantage.<sup>27</sup>

In a study made in Oregon, Coleman said:

The present practice of planning, preparing, and serving the entire meal gives emphasis which results in better carry-over to home situations. In this method of teaching, four girls plan a well-balanced meal, prepare the foods according to the best practices they have learned, and then serve this meal in as home-like an atmosphere as it is possible to attain in a high school homemaking department.<sup>28</sup>

Councilman, in her suggestions for the foods unit, said: "Since so many of the girls have some responsibility or interest in food preparation at home, a need for information about meal preparation was indicated."<sup>29</sup> Some of the individual problems of the girls were: being overweight, taking care of new kitchen and equipment, and managing time spent in food work so as to balance home and school and personal interests.

In her study, Deischer found that the changes made in food units were due to the low income level of the families and their need for knowledge in adequate diets. Usually the units were lengthened.<sup>30</sup>

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<sup>27</sup>High School Teachers Improve Management Practices In Food Classes, op. cit., p. 14.

<sup>28</sup>Commercy Wallace Coleman, "Optimal Storage in the Unit Kitchen," (unpublished Master's thesis, Oregon State College, Corvallis, 1946), p. 2.

<sup>29</sup>Councilman, op. cit., p. 29.

<sup>30</sup>Deischer, op. cit., p. 60.

Martin found changes in food units were made by 50 per cent of the teachers after home visits. Some increased the units from one to four weeks. The changes included: planning of adequate diets, preparation and serving of simple meals, planning ways to save food, and producing food for adequate home food supply.<sup>31</sup>

Nelson found that milk consumption was very low. Many of the girls had the responsibility of food preparation at home. Because of evidence of low nutritional knowledge, a unit on food for the family needs was developed to help the girls improve their ability to meet family nutritional needs on a limited income.<sup>32</sup> Suggested topics to be developed were: eating to maintain optimum health, meeting special food needs, management of resources in meal planning, and family entertaining.<sup>33</sup>

Suggestions for housing unit. In housing, Councilman said that the most common problem was caring for the house and lawn; but other problems were observed:

One family was in the process of remodeling. Others desired space for privacy, more storage space, and more furniture and equipment. As the need for, or interest in these problems was indicated by the pupils, the teacher should aid in securing helpful materials.<sup>34</sup>

Deischer's study showed that the changes in the housing unit consisted of lengthening and changing the teaching of home furnishings

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<sup>31</sup>Martin, op. cit., p. 93.

<sup>32</sup>Nelson, op. cit., p. 72.

<sup>33</sup>Ibid., p. 73.

<sup>34</sup>Councilman, op. cit., p. 30.

because the homes did not have much in them but the bare necessities. More emphasis was put on neatness and taking care of things.<sup>35</sup>

Martin's changes in housing were such as: making improvised equipment and simple house furnishings for the girls' homes, studying the best way to clean and care for homes, changing methods of teaching picture arrangement, renovating old furniture, cleaning kerosene lamps, wood stoves, unpainted floors and walls, and the like.<sup>36</sup>

Nelson's tabulations on housing showed that almost all of the families lived in one-family houses, with 63 per cent owning their homes. All but two families had lived in the community more than two years. Housing conditions were found to be inadequate in 45 per cent of the homes, with very crowded conditions prevailing in many instances.<sup>37</sup> She said:

It is evident, therefore, that there is need for more education in this area, even though it is recognized that economic improvement would be a decided factor in better housing. Although such education may not change the existing housing condition in DePue, it is probable that the girls through such study may come to an appreciation of the meaning and implications of good housing to happy living.<sup>38</sup>

Nelson developed a housing unit "to help students analyze, understand, and improve existing home conditions as far as possible wherever needed."<sup>39</sup>

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<sup>35</sup>Deischer, op. cit., p. 63-64.

<sup>36</sup>Martin, op. cit., p. 95-96.

<sup>37</sup>Nelson, op. cit., p. 55.

<sup>38</sup>Ibid., p. 21.

<sup>39</sup>Ibid., p. 55.

She suggested developing the following topics: relation of housing to family living, housing standards, housing costs, problems in making the house more livable, buymanship in relation to household needs, and the household budget and expense accounts.<sup>40</sup>

In DePue 50 per cent or more of the homes had "electricity, running water, a sewing machine, some type of refrigerator, a power washing machine, an electric iron, a double boiler, a radio, a vacuum cleaner, a furnace, a kitchen sink, and a kitchen stove using coal, gas, oil, or electricity as the medium for cooking."<sup>41</sup>

Most authorities believe that equipment in the school should not be too far above the reach of the families in the community. From the equipment the pupils listed as having in their homes Nelson felt that:

This study of home equipment seems to show that DePue homes in spite of housing inadequacy are fairly well equipped with modern labor-saving devices: therefore, it would not be inappropriate to make use of good equipment in the school laboratory.<sup>42</sup>

Suggestions for child care unit. In planning her child care unit, Councilman saw the need to stimulate interest in child development because the girls had not had much work in this area and did not seem interested in it. She used various teaching techniques, such as discussion, recorded observation, and socio-drama. The topics developed during the six weeks unit were: responsibilities of parenthood, including family finances, life begins, care and needs of small children, habits of children, and baby sitting. Enough interest was stimulated so that two of the eleven girls chose child care as home experiences.<sup>43</sup>

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<sup>40</sup>Ibid., p. 56.

<sup>41</sup>Ibid., p. 22.

<sup>42</sup>Loc. cit.

<sup>43</sup>Councilman, op. cit., p. 20-28.



In Deischer's study one teacher had her child development unit earlier in the year than planned because she found that the girls were having real problems with younger brothers and sisters.<sup>44</sup>

Nelson found that caring for small children was the responsibility of 38 per cent of the girls. Fifteen per cent of the ninth grade girls used this as a means of earning spending money. Because of this fact, a unit of three weeks on enjoying small children was developed so that the girls "may better understand and guide the development of small children."<sup>45</sup> Suggested topics to be discussed were: heredity as a factor in individual differences, growth and development of the young child from one to six, clothing problems of the young child, influence of habit formation on development, environment as a factor in development, emotional development, and factors in effective child guidance.<sup>46</sup>

Suggestions for family relationship unit. In studying family relationships, Nelson found that very few families take vacations together. Recreation for the family included such activities as picnics, joy riding, parties, family reunions, and home games.<sup>47</sup> Sixty-four per cent of the girls indicated that their homes were not happy. Nelson said:

Although quality of home life cannot readily be measured this would seem to be a fair index of strained home relations in a significant number of instances. The cause of much family friction is undoubtedly due to overcrowded homes and the tavern problem.<sup>48</sup>

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<sup>44</sup>Deischer, op. cit., p. 65.

<sup>45</sup>Nelson, op. cit., p. 67.

<sup>46</sup>Ibid., p. 68

<sup>47</sup>Nelson, op. cit., p. 23.

<sup>48</sup>Ibid., p. 61.

There were 12 saloons in the town of 2,257 people. In this unit, Nelson hoped that "a better understanding of home problems and a desire to make adjustments for satisfactory living may be developed."<sup>49</sup> Suggested topics to be developed were: some factors contributing to satisfactory family living, some causes of home friction, some guiding principles in reaching a satisfactory philosophy of life, fitting into the family circle, fitting into the community, and the changing environment.<sup>50</sup>

Councilman, in making suggestions in family relationships, found the personal problems of the girls were such that discussion and activities on boy-girl and family relationships were especially important.<sup>51</sup>

Deischer found the family relationship unit needed to be strengthened because there was much conflict between parents and children.<sup>52</sup>

Martin felt that in family relationships there was a need for discussion of possible kinds of social life in the homes of the community. Family problems, especially those created by the war, needed to be considered.<sup>53</sup>

Suggestions for family economics unit. In consumer economics, Deischer found that some of the parents wanted the girls to spend more time on money management. Many girls did the food buying for their mothers. This indicated the need for more work on food buying.<sup>54</sup>

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<sup>49</sup>Ibid., p. 62.

<sup>50</sup>Loc. cit.

<sup>51</sup>Councilman, op. cit., p. 32.

<sup>52</sup>Deischer, op. cit., p. 62.

<sup>53</sup>Martin, op. cit., p. 96

<sup>54</sup>Deischer, op. cit., p. 63-65.



Martin related this incident in consumer economics. In one home, during a visit the mother told of her interest in what her daughter had learned at school about money management and stated that this was something the family needed. As a result, the daughter, with the family's help, planned the family budget.<sup>55</sup>

Councilman stated she needed more information on consumer economic problems of the girls. She suggested class reports on solutions of individual problems to stimulate the interest of the girls in financial matters.<sup>56</sup>

Nelson found, in consumer economics, that some of the girls had a chance to manage money of their own, since 25 per cent had a regular allowance, 53 per cent of them earned their own spending money, and 59 per cent received money only by asking for it from their parents.<sup>57</sup> She felt that "wise consumer buymanship should permeate every area of home economics."<sup>58</sup> The first-year girls discussed shopping for clothing; the second-year girls, shopping for ready-made garments and marketing in foods; the third-year girls, budgeting the food money and wise garment buying.<sup>59</sup>

Suggestions for health unit. Health records studied by Nelson showed that the health of the children was very good. The school nurse made daily calls to the school. She visited the homes of those who were sick or absent for any length of time.<sup>60</sup>

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<sup>55</sup>Martin, op. cit., p. 100-101.

<sup>56</sup>Councilman, op. cit., p. 30.

<sup>57</sup>Nelson, op. cit., p. 19.

<sup>58</sup>Ibid., p. 25

<sup>59</sup>Ibid., p. 51-54.

<sup>60</sup>Ibid., p. 10.

Nelson developed a unit on home nursing in minor illnesses in her second-year homemaking classes. In this she discussed symptoms and treatment of diseases, care of the patient, and first aid.<sup>61</sup>

Councilman found a health unit was a definite need, due to the problems of the girls, such as being overweight, being underweight, having pimples, and having asthma.<sup>62</sup>

Martin indicated in the health unit that more emphasis should be placed on home nursing. Health conditions of the community were studied and a field trip to the town water supply system was made.<sup>63</sup>

Suggestions for home experiences. Home experiences, according to Deischer, were used by the teachers to meet the needs of the individual girl. Many teachers encouraged the girls to choose home projects that would help meet their present needs, such as the case of one girl who had planned to take clothing as her project. She was encouraged to drop this when it was found that the girl's mother was in the hospital and the girl had the responsibility of all the housework. The girls were also given extra help at school and different experiences at school that they could not get at home, perhaps because of economic conditions. One-tenth of the teachers indicated that they provided individual experiences for the girls at school.<sup>64</sup>

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<sup>61</sup>Ibid., p. 53.

<sup>62</sup>Councilman, op. cit., p. 30-31.

<sup>63</sup>Martin, op. cit., p. 96.

<sup>64</sup>Deischer, op. cit., p. 67.

Martin stated, about home experiences, that 68 per cent of the teachers reported they used information gained by home visits in guiding the girls in the selection, planning, and carrying out of home projects.<sup>65</sup>

When Councilman made out a list of suggestions for home experiences, she had the home needs of each pupil in mind. For example, one pupil, a member of a large family, who was responsible for most of the family ironing, including her twin brother's, which was mailed home, was encouraged to take, and did take, ironing short cuts for a home experience. Seven of the twenty-two home experiences seemed to be inspired by the clothing unit: two ironing short cuts, and five clothing construction experiences, some of them by girls who disliked even the thoughts of clothing construction at the beginning of the unit.<sup>66</sup>

Value of home visits. Outstanding values of home visits, according to the teachers in Deischer's study are:

To promote cooperation between home and school; to establish a feeling of unity between mother, student, and teacher; to foster rapport between teacher and student; to aid teacher in learning and understanding the problems of her students; and to help teachers glean an insight into student's home problems as they really are.<sup>67</sup>

Of the 135 teachers, 124 said they would retain home visiting as a part of the vocational program. Only one answered that she would eliminate visiting. Ten did not answer this question.<sup>68</sup> The supervisors believed the best reason for teachers to make home visits was "to discover home living problems of the student in order to aid teachers in planning school experiences."<sup>69</sup>

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<sup>65</sup>Martin, op. cit., p. 114.

<sup>66</sup>Councilman, op. cit., p. 19.

<sup>67</sup>Deischer, op. cit., p. 44-45.

<sup>68</sup>Ibid., p. 36.

<sup>69</sup>Ibid., p. 52.

Deischer made this statement:

Since only a small proportion of the teachers indicated adjustments in their courses to meet needs of students following home visiting experiences, there may be a need for further help in interpreting their findings into action.<sup>70</sup>

Nelson said:

The homemaking program could well provide students with an environment rich in opportunity for self-expression, development of skills involved in better homemaking, and appreciation of the possibilities for a more satisfying life.<sup>71</sup>

Councilman concluded that visiting the family early to get ideas of what help the family wanted the girl to get at school and to observe the needs helped her a great deal in planning the class activities. For the development of the homemaking curriculum, Councilman suggested that the teacher: plan her visits in such a way that she is aware of common problems and individual problems of first year, second year, and third year pupils, deal with the common problems through class units and with the individual problems through individual home practices, reports to the class, and home experiences.<sup>72</sup>

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<sup>70</sup>Ibid., p. 97.

<sup>71</sup>Nelson, op. cit., p. 79.

<sup>72</sup>Councilman, op. cit., p. 42.

### CHAPTER III

#### STATUS, KIND, AND USE OF HOME KITCHENS

To secure the information needed on home kitchens, the investigator devised two check sheets. One was checked by the girls in class to describe the kitchens of their homes. This had to do with general characteristics of the kitchen, working equipment and space for food preparation, storage of cleaning equipment, and laundry facilities. The other was used by the teacher after she visited each girl. This one had to do with appearance, standards of cleanliness, adequacy of work areas, adequacy and efficiency of eating and storage areas, and general arrangement.

Since both check lists dealt with the same objective area, it might be assumed that answers would agree. Such an assumption, however, omits the always real and imponderable human element. The girls, some to a greater degree than others, showed a natural bias due to pride, sensitiveness, defensive family loyalty, and a reluctance to reveal poverty. Recognition of such discrepancies between the points checked by the pupil and those checked by the investigator must enter any evaluation of check list results.

#### General Characteristics of Kitchen

In the olden days the kitchens were the center of almost all family activities. The water supply was far from the kitchen and was carried into the kitchen. Firelight, then candlelight, and later lamp-light were the sources of light. Many homes were heated entirely by the kitchen fireplace. With all of their inconveniences, most of these kitchens were comfortable and cheerful. Then came the day when a modern kitchen



was considered modern only if it was of clinical whiteness and professed efficiency. Today there is a trend toward the farmhouse type of kitchen that is the center of family activities, is comfortable, cheerful, and a pleasure in which to work. The general characteristics of the kitchens of this study will be discussed as to activities, water supply, heat, light and appearance.

Activities. Many activities took place in their kitchens according to the ninth grade homemaking pupils of Flat Rock High School (Table I). As was expected, all the families cooked in the kitchen and most of them ate there. More than two-thirds of the families used the kitchen for grooming, such as washing face and hands and taking a bath, and for laundry.

Water supply. As was expected in a rural community, about 60 per cent of the families carried water from the well, spring, or the neighbor's faucet. Forty per cent of the homes had running water (Table II). Only one family had a pump. This was conveniently located outside the kitchen door on a covered porch. Several of the families of this study had to find new sources of water because of the drought which caused the wells to dry up. One family had a well just outside the kitchen door that dried up, and as a result water had to be carried a long distance from an old spring in the pasture.

Three-fourths of the families heated water on top of the stove and/or in a reservoir that was filled with cold water and heated when the stove was in use. There was hot running water in one-fourth of the kitchens.

Method of heating kitchen. The stove used for cooking was used to heat three-fourths of the kitchens (Table III). In some cases this was an oil or electric stove, which is either an inadequate or expensive method of heating the kitchen on a cold winter evening. The rest of the families had a supplementary source of heat - a heater, furnace, or laundry heater.

TABLE I  
ACTIVITIES CARRIED ON IN KITCHENS ACCORDING  
TO PUPILS' QUESTIONNAIRE

Activity	Number of families *
Cooking . . . . .	28
Everyday eating . . . . .	25
Washing hands and face . . . . .	25
Taking a bath . . . . .	22
Laundry . . . . .	19
Studying . . . . .	13
Children's play . . . . .	9
Sewing . . . . .	7
Dressing . . . . .	2
"Living" . . . . .	0

\* Families of twenty-eight ninth grade homemaking pupils in Flat Rock High School, Surry County, North Carolina, April 1954

TABLE II  
WATER SUPPLY FOR HOME KITCHENS ACCORDING TO PUPILS' QUESTIONNAIRE

Water supply	Number of kitchens
Source	
Own well . . . . .	23
Running water . . . . .	11
Hand drawn . . . . .	11
Hand pump . . . . .	1
Spring . . . . .	4
Running water from neighbor's outdoor faucet .	1
System of heating	
Top of stove only . . . . .	13
Reservoir in stove as well as on top of stove	8
Furnace or water heater . . . . .	7



TABLE III  
METHOD OF HEATING KITCHEN ACCORDING  
TO PUPILS' QUESTIONNAIRE

Method	Number of kitchens
Kitchen stove . . . . .	21
Heater . . . . .	4
Furnace . . . . .	2
Laundry heater . . . . .	1

Lighting. All of the kitchens had curtains of some kind (Table IV). Most of the families used the curtains as the only method of regulating the light. This may have been satisfactory because of the orientation of the kitchen. A few of the families had shades and venetian blinds. All of the families had electricity except two. One of these was a low income migrant type of family and the other was that of a girl whose parents were quite elderly and the father believed that what was good enough for his father and grandfather was good enough for him.

According to the teacher, daylight was defined as adequate if the work areas received ample light from the windows in the kitchen. Almost all the kitchens had adequate daylight (Table IV). Artificial light was defined as adequate if the work areas received ample artificial light. Many of the homes were wired after they were built because rural electrification had been available only in the last few years in many sections of the county. A drop cord from the ceiling with a 60-watt bulb in it was a great improvement over the old kerosene lamp, but is defined as inadequate light. Only two kitchens visited were rated as having adequate artificial light.

Appearance. Since appearance is not a scientific analysis of a kitchen, but rather a total impression sensed by the viewer, any report on appearance as such must of necessity involve color harmony, atmosphere, and a general feeling which the investigator experienced as she enjoyed a friendly visit in the kitchen.

From the teacher's observation it was found that about two-thirds of the kitchens were colorful without being gaudy, the curtains or blinds were neat and in good condition and helped make the room inviting by softening the light (Table V). Over half of the kitchens needed some repair.

Most of the families had linoleum rugs or linoleum from wall to wall on the kitchen floor. Only a very few had bare unpainted wood floors in the

TABLE IV

## LIGHTING OF HOME KITCHENS

Characteristics of lighting	Number of kitchens
Treatment of windows according to pupils' questionnaire	
Curtains . . . . .	28
Window shades . . . . .	6
Venetian blinds . . . . .	4
Artificial light according to pupils' questionnaire	
Electric . . . . .	26
Kerosene . . . . .	2
Adequacy of light according to teacher's observation	
Daylight adequate . . . . .	25
Artificial light adequate . . . . .	2

TABLE V  
APPEARANCE OF HOME KITCHENS

Appearance	Number of kitchens
Attractiveness and condition according to teacher's observation	
Curtains or blinds	
In good condition . . . . .	20*
Attractive . . . . .	17*
Colorful . . . . .	17
In good repair . . . . .	12
Finishes according to pupils' questionnaire	
Floors**	
Wood	
Painted . . . . .	10
Unpainted . . . . .	6
Concrete . . . . .	2
Floor covering	
Linoleum . . . . .	24
Walls	
Sheetrock . . . . .	13
Wood	
Painted . . . . .	8
Unfinished . . . . .	1
Stained . . . . .	0
Wallpaper . . . . .	3
Plaster	
Painted . . . . .	2
Unfinished . . . . .	0
Cinderblocks . . . . .	1

\* One family visited had the curtains in the wash so the condition and attractiveness could not be judged.

\*\* More than one finish was listed by several pupils.

kitchen. Almost half the kitchens had walls of sheetrock. In some places this was painted and other places it was left in its natural state. Other wall finishes used were: painted wood, wallpaper, painted plaster, unfinished wood, and cinder block.

In one home the kitchen was in a log house about ten feet away from the two bedrooms that made up the new part of the house. Evidently, the kitchen was the original house, for it had a very low ceiling and steps indicated that there was an upstairs room or rooms. These two parts of the house were joined by a footlog about three feet off the ground. There was no covering of any kind connecting the two parts of the house. In the near future the family planned to build a kitchen onto the new part of the house.

#### Food Work

Work areas. Food preparation is, of course, the major job performed in the kitchen. The ease with which the work is done in the kitchen depends largely on the adequacy of work areas. The investigator judged adequacy of work areas from these four points: floor space sufficient for work; arrangement of areas to give continuous work space; cabinet space enough to store needed equipment; work areas free from traffic. Many of the kitchens were from nine by twelve feet to fourteen by fifteen feet in size. This was thought by the teacher, to be adequate floor space for the families in this study. Over three-fourths of the kitchens had adequate floor space (Table VI). Organized centers of work with continuous work surface were found in about a third of the kitchens. Isolated work centers were much more common (Figure 1). Slightly more than one-fourth of the kitchens had sufficient cabinet space. Almost three-fourths of them had work areas free from traffic.

Work equipment and space. From the pupils' questionnaire it was found that almost all the families had electric refrigerators (Table VII). Only four families had home freezers. Half of the families used a wood and coal stove for cooking. Almost the same number used electricity for

TABLE VI  
GENERAL ARRANGEMENT AND ADEQUACY OF FOOD WORK AREAS ACCORDING  
TO TEACHER'S OBSERVATION

Adequacy and organization of work area	Number of kitchens
Adequacy of work area	
Sufficient floor space . . . . .	22
Sufficient cabinet space . . . . .	8
Areas well arranged . . . . .	9
Work areas free from traffic . . . . .	19
Organization of work area	
Unorganized space . . . . .	18
Organized centers with continuous work surface	
U shaped . . . . .	5
Corridor shaped . . . . .	2
L shaped . . . . .	1
One wall . . . . .	0
Individual work centers . . . . .	2

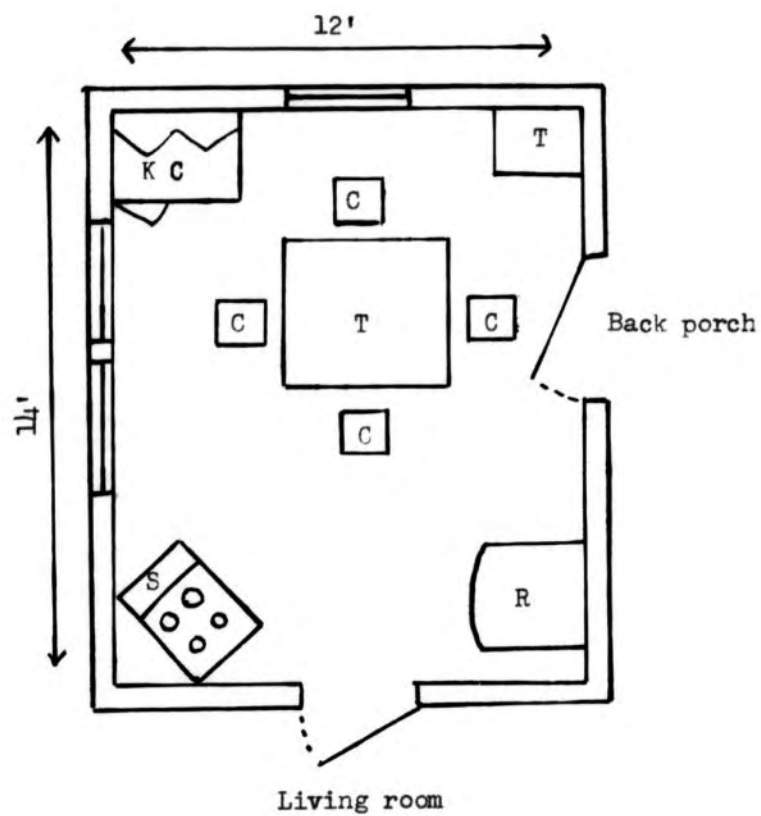


FIGURE 1

A HOME KITCHEN TYPICAL OF THOSE FOUND IN THE COMMUNITY



TABLE VII

WORKING EQUIPMENT AND SPACE FOR FOOD PREPARATION ACCORDING TO  
PUPILS' QUESTIONNAIRE

Working equipment and space	Number of kitchens
Refrigerator	
Electric . . . . .	25
Ice . . . . .	2
Oil . . . . .	1
Gas . . . . .	0
Freezer . . . . .	4
Stove	
Wood and coal . . . . .	14*
Electric . . . . .	10*
Oil . . . . .	3
Wood and electricity . . . . .	2
Gas . . . . .	0
Sink	
With running water . . . . .	11
Without running water . . . . .	8
None . . . . .	9
Location used for food preparation**	
Table . . . . .	21
Sink . . . . .	11
Cabinet near sink . . . . .	11
Cabinet near stove . . . . .	11
Cabinet near refrigerator . . . . .	4
Yard . . . . .	4
Porch . . . . .	2

\* One family had a wood stove and an electric stove.

\*\* In some kitchens more than one location was used for food preparation.

cooking. The wood stove had many advantages for rural families. Heating as well as cooking is usually the function of the stove. Many families use wood from their own farm, thus reducing the fuel cost. The entire surface of the wood stove is heated giving more space for cooking and giving a varied temperature for different types of cooking. The electric stove is cleaner and more convenient, but the initial cost as well as the fuel cost is greater than that of the wood stove. Over two-thirds of the families had sinks in the kitchen, but just about one-third had running water.

Most of the food preparation was done on the kitchen table and in or near the sink. Use of the table may have been due to the lack of cabinet space or to the fact that the table offered the best working height and more convenient space for sitting to work. Naturally, those who had sinks and running water used this place for some food preparation. Other places frequently used were the cabinet space near the sink and stove.

Eating areas. Most of the eating areas had plenty of space for seating and serving all members of the family without crowding and impressed the observer as being attractive (Table VIII). Many of the tables had colorful oilcloth or plastic tablecloths. Some kitchens had the modern breakfast set of metal and plastic that gave a neat and colorful appearance. A few ate in the dining room everyday.

Standards of cleanliness. In determining standards of cleanliness the observer, limited to casual and friendly visits, had to rely upon sensory impressions. These impressions fell into three rather well defined classifications. Into the high standard category the teacher placed those kitchens which were immaculate in order and appearance. In the fair standard

TABLE VIII  
EATING AREA ACCORDING TO TEACHER'S OBSERVATION

Characteristics of eating areas	Number of kitchens	
Area attractive . . . . .	24	
Space sufficient . . . . .	21	
Location for eating		
Kitchen . . . . .	14 9	23
Wooden table and chairs . . . . .		
Modern breakfast set of metal and plastic . .		
Dining room . . . . .	5	
Area used for other purpose at time of visit . . .	4	

class were placed those kitchens in which she judged clean food was prepared but the kitchen itself--walls, floor, work surfaces--was not spotless. The poor standard level included those kitchens that were uncomfortably dirty and presented a dire need for soap and water. Most of the families had a satisfactory standard of cleanliness (Table IX).

Garbage care is a problem of all rural homes. In the homes of this study, it was found from the pupils' questionnaire that only eight used a covered garbage pail but most of the families emptied the pail daily. Over one-fourth of the families did not use a pail but just threw the scraps out as they accumulated. Most of the garbage was fed to the farm animals and/or thrown on a garbage heap. During her visit the teacher observed thirteen garbage pails, only three of which were covered. If the pail containing the garbage was in some way covered it was thought to be adequate. Almost all the houses had screens, about half of the families had no food left out, and the cabinets and dish towels were clean.

Storage of food supplies and equipment. Planned storage is an important factor in making kitchens more functional. From the pupils' questionnaire it was found that everyday dishes were stored in a cabinet in the kitchen in most of the homes (Table X). Cooking equipment was stored in the kitchen cabinet and also a variety of other places, such as: the stove, drawers in the kitchen, hung on the wall, on open shelves, and pantry cabinet. Dish towels and cloths were stored near the stove or sink. As was expected, those having a refrigerator stored the perishable foods in it. Almost two-thirds of the staple supplies were stored in a cabinet near the stove or sink.

If there was enough space for the items to be stored, the storage was thought to be adequate. If the storage was well arranged and convenient

TABLE IX  
STANDARDS OF CLEANLINESS

Standards of cleanliness	Number of families
Garbage care in kitchen according to pupils' questionnaire	
Frequency of emptying*	
Daily . . . . .	21
Thrown out at once . . . . .	8
When full . . . . .	2
Kind of container	
Open pail . . . . .	12
Covered pail . . . . .	8
Garbage disposal according to pupils' questionnaire*	
Fed to pigs, animals and fowl . . . . .	23
Garbage heap . . . . .	22
Burned . . . . .	3
Buried . . . . .	1
Disposal unit in kitchen . . . . .	0
Garbage disposal adequate according to teacher's observations** . . . . .	3
Screens according to pupils' questionnaire	
Windows . . . . .	27
Doors . . . . .	26
Care of food according to teacher's observation	
Not left out . . . . .	18
Left out uncovered . . . . .	10
Cabinets easy to clean according to teacher's observation . . . . .	16
Dish towels clean according to teacher's observation*** . . . . .	14
Undesirable odors according to teacher's observation . . . . .	1
General cleanliness according to teacher's observation	
High standard . . . . .	11
Fair standard . . . . .	11
Poor standard . . . . .	6

\* More than one category was listed by several pupils.

\*\* Garbage disposal could not be observed in 15 kitchens.

\*\*\* Cleanliness of dish towels could not be observed in 5 kitchens.

TABLE X

STORAGE FACILITIES IN KITCHENS FOR FOOD SUPPLIES AND EQUIPMENT  
ACCORDING TO PUPILS' QUESTIONNAIRE

Storage facilities	Number of kitchens
Everyday dishes	
Kitchen . . . . .	26
Dining room . . . . .	2
Pantry . . . . .	0
Cooking equipment*	
Kitchen cabinet . . . . .	23
Stove . . . . .	11
Hung on wall . . . . .	7
Drawers in kitchen . . . . .	5
Open shelves . . . . .	1
Pantry cabinet . . . . .	2
Dish towels and cloths in use*	
Near stove . . . . .	17
Near sink . . . . .	11
Pantry . . . . .	2
Porch . . . . .	0
Perishable foods*	
Refrigerator . . . . .	25
Ice box . . . . .	2
Porch . . . . .	1
Pantry . . . . .	1
Cellar . . . . .	1
Spring . . . . .	1
Staple supplies*	
Cabinet near stove . . . . .	19
Cabinet near sink . . . . .	10
Cabinet near refrigerator . . . . .	4
Pantry . . . . .	2
Table in kitchen . . . . .	1
Cabinet on porch . . . . .	0

\* More than one place was listed by several pupils.



to the place of use, it was thought to be efficient. In many kitchens flour and cornmeal were stored on the floor, which was not considered adequate or efficient storage. Dishes were stored more adequately and efficiently than other items (Table XI). Over half the kitchens had adequate storage for cooking equipment and less than half efficient storage. Food storage was less adequate and efficient than storage for cooking equipment.

#### Storage of Cleaning Equipment

From the teacher's observation and the pupils' questionnaire it was found that there was very little planned storage of cleaning equipment (Table XII). Most of the brooms and mops were set in the corner of the kitchen. Only two families had a special closet for cleaning equipment. Both closets were adequate in size. The one in which the equipment was hanging and well placed was considered efficient.

#### Laundry

Washing and ironing are often tedious tasks in rural homes. From the pupils' questionnaire it was found that most of the families had electric washing machines with a wringer (Table XIII). Only three homes were without washing machine. Over half of the washing machines were located on the back porch, probably for ease in draining. Others were in the basement, kitchen, back room, tobacco pack house, and smoke house. All of the families with electricity had electric irons. Only one family had a mangle. Most of the families used a folding board. All stood to iron most of the time; five sat to iron once in a while.

TABLE XI

ADEQUACY AND EFFICIENCY OF STORAGE AREAS ACCORDING TO TEACHER'S  
OBSERVATION

Adequacy and efficiency of storage areas	Number of kitchens
Dishes*	
Adequate . . . . .	18
Efficient . . . . .	14
Cooking equipment**	
Adequate . . . . .	16
Efficient . . . . .	13
Food	
Adequate . . . . .	11
Efficient . . . . .	6

\* Storage of dishes could not be observed in 1 kitchen.

\*\* Storage of cooking equipment could not be observed in 3 kitchens.

TABLE XII

## STORAGE OF CLEANING EQUIPMENT

Cleaning equipment	Number of kitchens
Storage according to pupils' questionnaire	
Location*	
Corner of kitchen . . . . .	16
Porch . . . . .	15
Cabinet in kitchen . . . . .	3
Special closet . . . . .	2
Behind door . . . . .	1
Pantry . . . . .	1
Method of storing brooms and mops	
On floor . . . . .	23
Hanging . . . . .	5
Adequacy and efficiency according to teacher's observation**	
Adequate . . . . .	2
Efficient . . . . .	1

\* More than one place listed by several pupils.

\* \* Storage of cleaning equipment could not be observed in 13 kitchens.

TABLE XIII

## LAUNDRY FACILITIES ACCORDING TO PUPILS' QUESTIONNAIRE

Laundry facilities	Number of families
<b>Washing</b>	
Kind of washing machine	
Electric with wringer . . . . .	25
Electric with spin dry . . . . .	0
Automatic . . . . .	0
No machine . . . . .	3
Electric dryer . . . . .	0
Location of washing machine	
Porch . . . . .	15
Kitchen . . . . .	3
Basement . . . . .	3
Miscellaneous . . . . .	4
<b>Ironing</b>	
Kind of iron used	
Electric . . . . .	26
Flat . . . . .	2
Mangle . . . . .	1*
Ironing done on	
Folding board . . . . .	25
Table . . . . .	6**
Board without legs . . . . .	0
Position of worker when ironing	
Standing . . . . .	28
Sitting . . . . .	5***

\* The family with the mangle used an electric iron also.

\*\* Three of these families had a folding board but often used a table to iron on. Three used a table and had no board at all.

\*\*\* Five of the 28 occasionally sat to iron.

## CHAPTER IV

### SOME SUGGESTIONS FOR EFFECTIVE LEARNING EXPERIENCES RELATED TO MANAGEMENT IN KITCHENS

Data secured concerning the status, kind, and use of home kitchens, were used as a basis for suggesting some effective home and class experiences related to management in kitchens (pp. 45 - 57). Many management problems needing study were immediately apparent to the investigator, and additional ones will undoubtedly occur to other teachers working in these areas. More problems are suggested by the investigator than can be adequately solved by any one teacher in any one year, thereby affording the flexibility of choice to fit the needs of many given situations and groups.

Effective school instruction in the solution of any problem, chosen by the pupils and teacher for study, must first be adapted to the needs existing in the home kitchens, so that the pupils will be able to use the information and practices in their own homes.

Not only must school instruction be adapted to needs as they exist in home kitchens, but as many such problems as possible should be fitted into the first year's program of work, since some pupils drop out before the second year.

All suggested problems for food, housing, and clothing units grew out of data secured through the investigation. Any problem common to all pupils would establish the desirability of class experiences. Any problem common to a majority of the pupils would make a justifiable choice for

class experiences. Those problems, however, common to only a minority of the pupils could not justifiably be chosen for the whole group but would afford wise choices for home experiences, home projects, or individual or group reports in class.

Since no management problem is complete without analysis and decision making, all statements, whether relating to the whole group, a majority of the group, or an individual, are designed to involve these essential elements of problem solving.

Because school instruction loses much of its effectiveness unless it is carried over into the wider social area of the home, the teacher should always encourage a feeling of partnership between the mother and daughter by developing an awareness of the fact that they are seeking a common goal of achieving and maintaining a comfortable and livable home. For example, the daughter can assume definite responsibilities such as preparation of the evening meal when the mother works outside the home, as many mothers did in the investigation; the mother can make a definite contribution by accepting many new ideas and ways of doing things that the daughter has learned at school.

The school laboratory should demonstrate the best arrangement and storage of small equipment in work centers, showing examples of various arrangements adaptable to varying home conditions.

Pupils should be encouraged to improve their home kitchens by rearrangement, orderliness, cleanliness, and adaptation of methods of work, utilizing the present furnishings and equipment to better advantage.

In order to establish a closer relationship between her school instruction and the community, the teacher should investigate community



resources available in her locality. Such resources, when used, make school experiences richer for the pupil, afford helpful instructional aids for the teacher, and establish mutual bonds of understanding between the school and the community.

Since the ultimate goal of education is social progress, the teacher should always encourage wider community services which may evolve from her teaching.

# SOME SUGGESTIONS FOR FOOD UNIT

Status, Kind, and Use of Home Kitchens	Problems	School Experiences	Home Experiences	Community Services
Of course, all twenty-eight families cooked in the kitchen.	How does the time and energy necessary and available affect the form in which foods are served by the farm family?	Study the time and energy used in the preparation of food in different forms. In what form can foods be served simply and attractively? Plan and serve simple meals for a farm family.	Serve a meal to your family using some of these suggestions.	
Eighteen had unorganized work areas for food preparation	How can the arrangement of equipment and food preparation areas cut down on time and energy expended?	Study various arrangements of food preparation areas. Study laboratory kitchens and rearrange small equipment for greater ease in working in the laboratory. Ask yourself these questions: Why do you work where you do? Is everything there that you need, or do you take unnecessary steps? What makes for ease in working in the kitchen? What is inconvenient? Evaluate arrangement of large equipment in laboratory.	With the help of your mother, arrange work areas for food preparation.	Have a local builder on kitchen planning at a P.T.A. meeting. Show a film on kitchen arrangement at the same meeting.

SOME SUGGESTIONS FOR FOOD UNIT (Continued)

Status, Kind, and Use of Home Kitchens	Problems	School Experiences	Home Experiences	Community Services
Twenty-one used the kitchen table for food preparation.	Where is food prepared in the kitchen at home and why at that place?	Discuss places of food preparation in the home.	Analyze some type of food preparation you do and see if it can be done at a better place. With your family, plan for steps in improving your kitchen in the next several years. Make inexpensive improvements in work areas at home.	
Twenty-five had electric refrigerators. Fourteen had wood stoves. Ten had electric stoves. Three had oil stoves. Two had a combination wood and electric stove.	What problems arise in the use and care of the electric refrigerator? What problems arise in the use and care of the type stove your family has?	Study manufacturer's directions for use and care of equipment. Demonstrate use and care of refrigerator and stove. Study labor saving devices and discuss whether buying them would justify the cost.	Collect illustrations and information on different features found on refrigerators and stoves. Evaluate these as to luxury or efficiency items.	Invite utility home economist to demonstrate care and use of refrigerator and stove to mothers of pupils. Show movie on use and care of refrigerator and stove.
Food storage space was inadequate in 17 of the 28 homes. Perishable foods were stored in the refrigerator by 25 of the families. Staples were stored in a cabinet near the stove by 19 families.	What types of storage make for ease in storing food in the home? How may food storage be improved in your home?	After studying food storage set up criteria for adequate and efficient food storage. (Food and small equipment stored in or near a center where it is used most often. Perishables at a temperature to provide minimum bacterial growth.)		

SOME SUGGESTIONS FOR FOOD UNIT (Continued)

Status, Kind, and Use of Home Kitchens	Problems	School Experiences	Home Experiences	Community Services
Staples were stored in a cabinet near the sink by ten.		Improve food storage in the cabinets in the laboratory. Demonstrate the proper storage of food in the refrigerator.	Make changes at home to improve food storage. Check your refrigerator to see how food is stored.	
Eighteen had adequate storage of dishes. Sixteen had adequate storage of cooking equipment.	How may the storage of dishes and cooking equipment be improved in the laboratory? What changes could you make at home?	Study various bulletins and references on kitchen storage and have class discussion. In groups, plan storage for sink center, mixing center, range center and serving center. Plan storage for the laboratory so that items (1) used most often are within easy reach span, (2) are stored where first or most frequently used, (3) are one row deep on shelves. Study and use a standard check list on adequate food storage. Make a check list applicable to your situation. Use this check list at home and plan for better food storage.	With the help of your family, rearrange one area in your kitchen to make it a better center.	Display in school laboratory, bulletins and other references on kitchen storage. Show a movie on planned storage to interest adults.

SOME SUGGESTIONS FOR FOOD UNIT (Continued)

Status, Kind, and Use of Home Kitchens	Problems	School Experiences	Home Experiences	Community Services
		Study bulletins and references on devices for improving storage. Design and have agricultural boys make some improvements for storage in cabinets in kitchen units. Refinish old cabinets and make them into useful storage for the laboratory.		Have open house to display improvements in kitchen units of the laboratory.
Eating areas were in kitchens of 23 of the 28 homes.	In what ways can the eating areas be made convenient? What types of meal service are desirable and practical for farm families?	After a study of meal service, set a table and analyze the motions. As a group, plan a method of saving time and energy at this task. Plan a cart or table with wheels to be used to save steps. Plan for ways of making the table convenient and attractive.	With the help of your family, build or re-finish something for your kitchen that will make the kitchen easier to work in.	Analyze and rearrange the steps used at home in table setting. Plan different ways of making the table attractive at meal time. Rework an old table into a rolling one, if this is approved by your family.

SOME SUGGESTIONS FOR FOOD UNIT (Continued)

Status, Kind, and Use of Home Kitchens	Problems	School Experiences	Home Experiences	Community Services
Of the 28 families 11 had a sink with running water. Eight had a sink without running water. Nine had no sink.	How can dishes be washed efficiently under various conditions?	In groups demonstrate washing dishes under various conditions such as might be found in the pupils' homes. Discuss the methods used.	After supper clear the table and wash the dishes using the usual method. Time yourself and record time. Make a plan for the same task, and the next night use this plan. Report the comparison to the class.	
Eleven families had a high standard of cleanliness. Eleven had a fair standard. Six had a poor standard of cleanliness.	What is meant by a high standard of cleanliness in the kitchen? How may a high standard be planned for and maintained?	From discussion set criteria for a high standard of cleanliness. Discuss care and storage of dish towels and cloths. Demonstrate techniques in daily kitchen cleaning. In groups, try various cleaning materials and report findings to class. Encourage a high standard of cleanliness in the school laboratory at all times.	Plan a schedule for cleaning your kitchen and try this for a week.	



SOME SUGGESTIONS FOR FOOD UNIT (Continued)

Status, Kind, and Use of Home Kitchens	Problems	School Experiences	Home Experiences	Community Services
<p>All had to dispose of garbage themselves.</p> <p>Twenty-one emptied garbage daily.</p> <p>Twelve had open pails.</p> <p>Eight had covered pails.</p> <p>Eight threw the garbage out as it accumulated.</p> <p>Twenty-three families fed garbage to animals.</p> <p>Twenty-two had a garbage heap for non-edibles.</p> <p>Three burned garbage.</p>	<p>In what ways can garbage be cared for in the kitchens and disposed of satisfactorily?</p>	<p>Invite the sanitary inspector to talk to the class on sanitary disposal of garbage.</p> <p>Discuss how diseases are spread through impure water, inadequate disposal of garbage, by insects, etc.</p> <p>Discuss methods of garbage disposal that make for satisfactory conditions.</p> <p>Discuss methods of building an incinerator.</p> <p>Explain the value of a compost heap.</p> <p>Discuss flattening tin cans before throwing them out.</p>	<p>With the help of your family, improve garbage disposal at home.</p> <p>With the help of your family, build an incinerator, and/or start a compost heap.</p>	<p>Write, for the school paper, the talk given by the sanitary inspector.</p> <p>Display in laboratory, when interested adults will be present, any bulletins and other references on building incinerators, compost heaps, and septic tanks.</p>

# SOME SUGGESTIONS FOR HOUSING UNIT

Status, Kind, and Use of Home Kitchens	Problems	School Experiences	Home Experiences	Community Services
Seventeen of the 28 kitchens were color- ful.	In what ways can the kitchen be made attractive?	Discuss various ways of making a kitchen attractive.	Plan a color scheme for your kitchen if it is to be painted soon. Plan other ways of making your kitchen attractive, such as wall, floor, and window treatment, improved arrangement, higher standard of cleanliness, and orderliness.	
Twelve kitchens were in good repair.	What simple repairs can we make in the kitchen? How can we prolong the life of mater- ials and equipment used in the kitchen?	Invite the agricul- tural teacher to demonstrate simple repairs. Demonstrate upkeep of materials and equipment, such as care of cutlery and cleaning various metals and floor coverings.	Study bulletins and other references on various repairs. Call on the agricul- tural teacher to supervise projects in simple repair. Report to class any unusual repair job and methods of up- keep.	Invite the mothers to the demonstration on household repairs by the agricultural teacher.

# SOME SUGGESTIONS FOR HOUSING UNIT (Continued)

Status, Kind, and Use of Home Kitchens	Problems	School Experiences	Home Experiences	Community Services
Electric lights were in 26 of the homes. Twenty-five had adequate day light. Two had adequate artificial light.	In what ways can the light be made adequate in the kitchen: In day time? At night?	Invite a light engineer to talk about lighting and wiring and give a demonstration on lighting. Set criteria for adequate day and artificial light. Analyze the light at school under day and night conditions. Demonstrate improvements in the school laboratory.	Analyze the light at home in terms of size of bulbs, distance from activity, whether the bulb is covered. Make a plan for improving the light in your kitchen. Discuss this plan with your family and see what can be done. Design and make a lamp for a specific place in the kitchen to improve light in that area.	Invite a light engineer to demonstrate adequate artificial light for various activities to interested adults in the community.
Eleven of the 28 families had running water. Eleven drew water from a well. Four carried water from a spring.	What problems arise when the water has to be carried, stored, and heated?	Invite sanitary inspector to talk to the class on sanitary water supply. Discuss some of the problems that arise and solutions used in various homes.	Bring samples of water from home to be tested.	

SOME SUGGESTIONS FOR HOUSING UNIT (Continued)

Status, Kind, and Use of Home Kitchens	Problems	School Experiences	Home Experiences	Community Services
Thirteen used the top of the stove for heating water. Eight had a reservoir in the stove. Seven had hot running water from a furnace or water heater.	How is management different when you have running water?	Develop plans for gradually improving the sanitation and/or convenience of the water supply. Demonstrate methods possible when you have improved equipment.	With the help of your family, make some improvement in home water supply.	Plan a forum in the laboratory for adults interested in improving water supply. Use local engineers and dealers as consultants. Display bulletins and references for families in the community who are improving water supply.
Twenty-one heated the kitchen with the kitchen stove.	What problems arise when the stove used for cooking is used to heat the kitchen?	Discuss some of the problems and possible solutions.	Try some of the possible solutions.	
Sixteen families stored cleaning supplies in corner of kitchen. Fifteen stored them on the porch. Twenty-three set brooms and mops on the floor. Five hung brooms and mops. Two had a special closet for cleaning equipment.	How can cleaning supplies and equipment be stored satisfactorily?	Study bulletin and references on storage of cleaning supplies. Determine whether cleaning supplies and equipment are adequately stored in the laboratory. Design more adequate cleaning closet or area for the laboratory.	Plan a cleaning closet or area suitable for your kitchen. With the help of your family fix such a closet or area.	Visit new homes and observe spaces of storage in the kitchen.

SOME SUGGESTIONS FOR HOUSING UNIT (Continued)

Status, Kind, and Use of Home Kitchens	Problems	School Experiences	Home Experiences	Community Services
Thirteen used the kitchen for study.	How can a study center be developed in the home?	List the requirements of a good study center. Determine the amount of light needed.	Try various places and conditions for study and from these findings arrange a study center suited to your needs.	
Nine of the families used the kitchen for children's play.	How can children play in the kitchen with safety and independence without being under foot?	Discuss safety hazards for children in kitchens. Study a standard check list of safety in a kitchen. Discuss kitchen supplies used in first aid, such as soda, salt and grease. Set up a play center near a unit kitchen and have a child play there during a laboratory period. Study types of toys suitable for play in the kitchen. Make toys suitable for the play center set up.	Use this check list in your kitchen. With the help of your family, remedy the hazards you find.  If there are small children in the home who play in the kitchen, plan and carry out a play center as a project. Make toys for children at home suitable for play in the kitchen.	At a group meeting of homemakers and future homemakers show a film on safety in the home.  Have a tea for homemakers with young children. Show a film on developing through play. Exhibit toys and play center made and set up by the pupils.

# SOME SUGGESTIONS FOR CLOTHING UNIT

Status, Kind, and Use of Home Kitchens	Problems	School Experiences	Home Experiences	Community Services
<p>Twenty-five of the 28 families used the kitchen to wash hands and face.</p> <p>Twenty-two used the kitchen to take baths.</p>	<p>What makes a good grooming center?</p> <p>How can grooming be done as satisfactorily as possible in the kitchen?</p>	<p>Discuss equipment needed for a grooming center.</p> <p>Plan a grooming center.</p> <p>Design and build a screen to be used in the laboratory as a part of a grooming center. Make pockets or shelves for articles needed.</p>	<p>With the help of your family, arrange a convenient grooming center at home.</p> <p>Devise a way of obtaining privacy for grooming and dressing.</p>	<p>At some school function have the girls show the grooming center.</p>
<p>Seven of the families used the kitchen for sewing.</p>	<p>How much sewing is done? What kind? Where? How can it be done satisfactorily?</p>	<p>List sewing activities carried on in the home and the equipment needed.</p>	<p>Plan an efficient sewing center for your home.</p>	<p>In the department, display bulletins and references on sewing centers when parents or other adults are visiting.</p>
<p>Twenty-five of the families had electric washing machines with wringers.</p> <p>Twenty-six had electric irons.</p> <p>Twenty-five had folding ironing boards.</p> <p>All stood to iron.</p>	<p>How can laundering be done more efficiently with the equipment commonly found in this community?</p>	<p>Do a family laundry at school.</p> <p>Divide the class into groups. Let each group choose a step in the laundering process, study this and demonstrate it to the others as they watch for methods and equipment to improve the process.</p>		



SOME SUGGESTIONS FOR CLOTHING UNIT (Continued)

Status, Kind, and Use of Home Kitchens	Problems	School Experiences	Home Experiences	Community Services
	What are the things to consider when arranging laundry equipment? How is it arranged at home? Can the arrangement be improved?		Evaluate the laundry process at home and plan for improved methods.	
		Select for school purchase, electric washing machine and supplementary laundry equipment needed at school. Borrow from a retailer, electric irons. In groups study and demonstrate the qualities of the irons to the class. Evaluate the features of laundry equipment listed in business sponsored teaching aids. Demonstrate ironing short cuts to save time and energy.	Decide about supplementary laundry equipment needed to make laundering easier at home.	Display new equipment and have the girls explain use and care of it to mothers invited to school.
		Discuss kinds of ironing boards. Discuss and select an adjustable ironing board for school purchase.		Demonstrate ironing short cuts to mothers.

SOME SUGGESTIONS FOR CLOTHING UNIT (Continued)

Status, Kind, and Use of Home Kitchens	Problems	School Experiences	Home Experiences	Community Services
		Develop good techniques in ironing, such as sitting comfortably to iron and letting heat do work instead of pressure.	Iron at home in the usual way. Note time and energy required. Plan and carry out an easier way of doing the same amount of ironing. Compare time and energy.	
The washing machine was located on a porch in fifteen homes.	Why is laundry done where it is at home? Is it the best place?	Discuss laundry methods used at home and possible ways of improving these methods.	Study the laundry center at home and see if it can be made more convenient in location and arrangement.	

## CHAPTER V

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

A study was made in the homes of twenty-eight ninth grade pupils enrolled in homemaking classes in Flat Rock High School, Surry County, North Carolina, to determine the status, kind, and use of the kitchens. The data were utilized as a basis for suggesting some effective home and class experiences related to management in kitchens.

Two check sheets were used--one by the teacher after she had visited the home of each girl in the class to record her informal observation of the kitchens, the other by the pupils to describe the kitchens in their homes.

The conditions found in homes of ninth grade homemaking pupils are summarized in Table XIV.

To use these data most advantageously the investigator suggests that the teacher recognize:

1. That the kitchen is the location for meal service, grooming, and laundry in most of the homes, and that it is frequently used for study, children's play, sewing, and dressing.
2. That work in the kitchen is done in unorganized work areas with inadequate artificial light and with inadequate and inefficient storage for food and cleaning equipment.
3. That the kitchen stove is often the only source of heat for the room and for heating water which along with the coal and wood have to be carried. This poses a problem for rural families which the teacher

TABLE XIV

## CONDITIONS FOUND IN THE HOME KITCHENS OF THE PUPILS

68% or more	34 - 67%	Less than 34%
<b>Activities</b> Cooking . . . . . 28 Everyday eating . . . . . 25 Washing face and hands . . . 25 Taking a bath . . . . . 22 Laundry . . . . . 19	<b>Activities</b> Studying . . . . . 13	<b>Activities</b> Children's play . . . . . 9 Sewing . . . . . 7 Dressing . . . . . 2
	<b>Water Supply Source</b> Running water from own well 11 Hand drawn or pumped from own well . . . . . 12 System of heating water Top of stove only . . . . . 13	<b>Water Supply Source</b> Carried from own spring . . . . 4 Carried from neighbor's faucet 1 <b>System of heating water</b> Reservoir in stove as well as on top of stove . . . . . 8 Furnace or water heater . . . . 7
<b>Method of heating</b> Kitchen stove . . . . . 21		<b>Method of heating</b> Heater . . . . . 4 Furnace . . . . . 2 Laundry heater . . . . . 1
<b>Lighting</b> Treatment of windows Curtains . . . . . 28 <b>Kind of artificial light</b> Electric . . . . . 26 <b>Adequacy of light</b> Daylight adequate . . . . . 25	<b>Lighting</b> Treatment of windows Window shades or venetian blinds . . . . . 10	<b>Lighting</b> <b>Kind of artificial light</b> Kerosene . . . . . 2 <b>Adequacy of light</b> Artificial light adequate . . . 2

TABLE XIV

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	<b>Water Supply Source</b> Running water from own well 11 Hand drawn or pumped from own well . . . . . 12 System of heating water Top of stove only . . . . . 13	<b>Water Supply Source</b> Carried from own spring . . . . 4 Carried from neighbor's faucet 1 <b>System of heating water</b> Reservoir in stove as well as on top of stove . . . . . 8 Furnace or water heater . . . . 7
<b>Method of heating</b> Kitchen stove . . . . . 21		<b>Method of heating</b> Heater . . . . . 4 Furnace . . . . . 2 Laundry heater . . . . . 1
<b>Lighting</b> Treatment of windows Curtains . . . . . 28 <b>Kind of artificial light</b> Electric . . . . . 26 <b>Adequacy of light</b> Daylight adequate . . . . . 25	<b>Lighting</b> Treatment of windows Window shades or venetian blinds . . . . . 10	<b>Lighting</b> <b>Kind of artificial light</b> Kerosene . . . . . 2 <b>Adequacy of light</b> Artificial light adequate . . . 2

TABLE XIV (Continued)

## CONDITIONS FOUND IN THE HOME KITCHENS OF THE PUPILS

68% or more	34 - 67%	Less than 34%
<b>Appearance</b> Curtains or blinds In good condition . . . . 20  Floor covering Linoleum . . . . . 24	<b>Appearance</b> Curtains or blinds Attractive . . . . . 17 Kitchen colorful . . . . . 17 In good repair . . . . . 12  Floor Painted wood . . . . . 10  Wall Sheetrock . . . . . 13	<b>Appearance</b>      Floor Unpainted wood . . . . . 6 Concrete . . . . . 2  Wall Painted wood . . . . . 8 Unfinished wood . . . . . 1 Wallpaper . . . . . 3 Plaster painted . . . . . 2 Cinderblock . . . . . 1
<b>Food work areas</b>  Adequacy of work areas Sufficient floor space . . 22 Free from traffic . . . . 19	<b>Food work areas</b> Unorganized . . . . . 18	<b>Food work areas</b> Organized centers with continuous work surface . . . . 8 Individual work centers . . . . 2 Adequacy of work areas Areas well arranged . . . . . 9 Sufficient cabinet space . . . 8
<b>Work equipment and space</b> Electric refrigerator . . . . 25	<b>Work equipment and space</b>  Wood and coal stove . . . . . 14 Electric stove . . . . . 10  Sink with running water . . . 11	<b>Work equipment and space</b> Ice box . . . . . 2 Oil refrigerator . . . . . 1 Freezer . . . . . 4 Oil stove . . . . . 3 Combination wood and electric stove . . . . . 2 Sink without running water . . 8 No sink . . . . . 9



TABLE XIV (Continued)

## CONDITIONS FOUND IN THE HOME KITCHENS OF THE PUPILS

68% or more	34 - 67%	Less than 34%
Location for food preparation Table . . . . . 21	Location for food preparation Sink . . . . . 11 Cabinet near sink . . . . 11 Cabinet near stove . . . . 11	Location for food preparation Cabinet near refrigerator . 4 Yard . . . . . 4 Porch . . . . . 2
Eating area Attractive . . . . . 24 Space sufficient . . . . . 21 Located in kitchen . . . . . 23		Eating area Located in dining room . . . 5 Used for other purposes at time of visit . . . . . 4
Standards of cleanliness Garbage emptied daily . . . . 21  Garbage disposal Fed to pigs, other animals and fowl . . . . . 23 Garbage heap for non edibles 22  Screens Windows . . . . . 27 Doors . . . . . 26	Standards of cleanliness  Garbage container Open pail . . . . . 12  Care of food No food left out . . . . . 18 Left out uncovered . . . . 10 Cabinets easy to clean . . . . 16 Dish towels clean . . . . . 14  General cleanliness High standard . . . . . 11 Fair standard . . . . . 11	Standards of cleanliness Garbage thrown out at once . 8 Emptied when full . . . . . 2 Garbage container Covered pail . . . . . 8 Garbage disposal Burned . . . . . 3 Buried . . . . . 1 Adequate disposal . . . . . 3  Undesirable odors . . . . . 1 General cleanliness Poor standard . . . . . 6

TABLE XIV (Continued)

## CONDITIONS FOUND IN THE HOME KITCHENS OF THE PUPILS

68 % or more	34 - 67%	Less than 34%
Storage	Storage	Storage
Everyday dishes		Everyday dishes
Kitchen . . . . . 26		Dining room . . . . . 2
Cooking equipment	Cooking equipment	Cooking equipment
Kitchen cabinet . . . . . 23	In or on stove . . . . . 11	Hung on wall . . . . . 7
		Drawer in kitchen . . . . . 5
		Pantry cabinet . . . . . 2
		Open shelves . . . . . 1
	Dish towels in use	Dish towels in use
	Near stove . . . . . 17	Pantry . . . . . 2
	Near sink . . . . . 11	
Perishable foods		Perishable foods
Refrigerator . . . . . 25		Ice box . . . . . 2
		Porch . . . . . 1
		Pantry . . . . . 1
		Cellar . . . . . 1
		Spring . . . . . 1
Staple supplies	Staple supplies	Staple supplies
Cabinet near stove . . . . . 19	Cabinet near sink . . . . . 10	Cabinet near refrigerator . . 4
		Pantry . . . . . 2
		Table in kitchen . . . . . 1
	Adequacy and efficiency of areas	Adequacy and efficiency of areas
	Dishes adequate . . . . . 18	
	Dishes efficient . . . . . 14	
	Cooking equipment adequate . 16	
	Cooking equipment efficient 14	
	Food adequate . . . . . 11	
		Food efficient . . . . . 6

TABLE XIV (Continued)

## CONDITIONS FOUND IN THE HOME KITCHENS OF THE PUPILS

68% or more	34 - 67%	Less than 34%
Storage of cleaning equipment	Storage of cleaning equipment Location Corner of kitchen . . . . 16 Porch . . . . . 15	Storage of cleaning equipment Location Cabinet in kitchen . . . . 3 Special closet . . . . . 2 Behind door . . . . . 1 Pantry . . . . . 1
Method of storing brooms and mops On floor . . . . . 23		Method of storing brooms and mops Hanging . . . . . 5 Storage of cleaning equipment Adequate . . . . . 2 Efficient . . . . . 1
Laundry equipment and method Washing machine Electric with wringer . 25	Laundry equipment and method Location of washing machine Porch though not always used there . . . . . 15	Laundry equipment and method Washing machine None . . . . . 3 Location of washing machine Kitchen . . . . . 3 Basement . . . . . 3 Miscellaneous . . . . . 4
Iron Electric . . . . . 26		Iron Flat . . . . . 2 Mangle . . . . . 1
Ironing done on: Folding board . . . . . 25		Ironing done on: Table . . . . . 6
Position of worker when ironing Standing . . . . . 28		Position of worker when ironing Sitting occasionally . . . . 5

might help solve by securing bulletins and pamphlets on simple and inexpensive installations of water, heating, and sewage systems.

4. That care and disposal of garbage is a family problem of all rural areas since they do not have community garbage disposal.

5. That most rural homes have no laundry center.

6. That although almost all of the families have electric refrigerators, washing machines, and irons, there is a need for education in the correct use of this equipment and in work saving methods.

7. That correct posture would conserve energy in performing washing, ironing, and other household tasks.

8. That many families are at a disadvantage by reason of unpainted walls, uncovered floors, and unfinished work surfaces.

For the development of the homemaking curriculum, the investigator suggests that the teacher:

1. Adapt school instruction to needs existing in home kitchens.

2. Deal with the most urgent needs of her pupils in her program of work during the first year.

3. Recognize that any problem common to the majority of pupils would be a justifiable choice for class experiences, and that problems common to a minority of the pupils would afford wise choices for individual experiences.

4. Remember that no management is involved without analysis and decision making.

5. Encourage a feeling of partnership between the mother and daughter by developing an awareness that they are seeking a common goal of achieving and maintaining a comfortable and livable home.

6. Develop work centers in the school laboratory as examples for home application.

7. Encourage better use of the furnishings and equipment in the pupils' homes.

8. Use community resources available in her locality.

9. Encourage wider community services which may evolve from her teaching.

For further research, the investigator recommends a continuing study of some of the teaching units suggested on the basis of the recorded data, observing and testing results in the form of improvement of home practices, home conditions and family relationships.

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APPENDIX

TEACHER'S OBSERVATION CHECK SHEET OF HOME KITCHENS  
(To be used after each home visit)

HOME VISITED \_\_\_\_\_

I. Appearance

Colorful: Yes \_\_\_\_\_ No \_\_\_\_\_

Light: (Daytime) Adequate \_\_\_\_\_ Inadequate \_\_\_\_\_

(Night) Adequate \_\_\_\_\_ Inadequate \_\_\_\_\_

Curtains or blinds: Yes \_\_\_\_\_ No \_\_\_\_\_

Good condition: Yes \_\_\_\_\_ No \_\_\_\_\_

Attractive: Yes \_\_\_\_\_ No \_\_\_\_\_

Repairs needed: Yes \_\_\_\_\_ No \_\_\_\_\_

Cleanliness: Shows high standards \_\_\_\_\_ Fair \_\_\_\_\_ Poor \_\_\_\_\_

II. Sanitation

Adequate disposal of garbage: Yes \_\_\_\_\_ No \_\_\_\_\_

Floor of a material easy to clean: Yes \_\_\_\_\_ No \_\_\_\_\_

Cabinets easy to clean: Yes \_\_\_\_\_ No \_\_\_\_\_

Dish towels and cloths clean: Yes \_\_\_\_\_ No \_\_\_\_\_

Food left out: Yes \_\_\_\_\_ No \_\_\_\_\_

Undesirable odors: Yes \_\_\_\_\_ No \_\_\_\_\_

III. Adequacy of Work Areas

Well arranged: Yes \_\_\_\_\_ No \_\_\_\_\_

Sufficient cabinet or table space: Yes \_\_\_\_\_ No \_\_\_\_\_

Sufficient floor space: Yes \_\_\_\_\_ No \_\_\_\_\_

IV. Adequacy and Efficiency of eating area

Kind of arrangement for eating \_\_\_\_\_

Attractive Yes \_\_\_\_\_ No \_\_\_\_\_

Sufficient space. Yes \_\_\_\_\_ No \_\_\_\_\_

Other uses: Yes \_\_\_\_\_ No \_\_\_\_\_ What \_\_\_\_\_

## V. General arrangement

Area of work: L shaped \_\_\_\_\_ U shaped \_\_\_\_\_ Corridor shaped \_\_\_\_\_

One wall \_\_\_\_\_ Individual work centers \_\_\_\_\_ No organization \_\_\_\_\_

Routing: Adequate \_\_\_\_\_ Inadequate \_\_\_\_\_

## VI. Adequacy and efficiency of storage areas

Food: Adequate \_\_\_\_\_ Inadequate \_\_\_\_\_ Efficient \_\_\_\_\_ Inefficient \_\_\_\_\_

Dishes: Adequate \_\_\_\_\_ Inadequate \_\_\_\_\_ Efficient \_\_\_\_\_ Inefficient \_\_\_\_\_

Cooking equipment: Adequate \_\_\_\_\_ Inadequate \_\_\_\_\_ Efficient \_\_\_\_\_

Inefficient \_\_\_\_\_

Cleaning supplies: Adequate \_\_\_\_\_ Inadequate \_\_\_\_\_ Efficient \_\_\_\_\_

Inefficient \_\_\_\_\_

## QUESTIONNAIRE ON HOME KITCHENS

NAME \_\_\_\_\_

Please check the answer or answers to each of the following questions:

## I. What activities are carried on in the kitchen?

Cooking \_\_\_\_\_ Everyday eating \_\_\_\_\_ Laundry \_\_\_\_\_ Sewing \_\_\_\_\_ Study \_\_\_\_\_

Taking a bath \_\_\_\_\_ Washing hands and face \_\_\_\_\_ Dressing \_\_\_\_\_

Used as living room \_\_\_\_\_ Children's play \_\_\_\_\_

## II. How is the water supply

Obtained: Well \_\_\_\_\_ Running water \_\_\_\_\_ Pump \_\_\_\_\_ Spring \_\_\_\_\_

Heated: Hot running water \_\_\_\_\_ On stove \_\_\_\_\_ In stove reservoir \_\_\_\_\_

## III. How is the laundry done?

Washing machine \_\_\_\_\_ Electric with wringer \_\_\_\_\_

Electric with spin dry \_\_\_\_\_ Automatic \_\_\_\_\_ None \_\_\_\_\_ Electric dryer \_\_\_\_\_

Machine located: In kitchen \_\_\_\_\_ On porch \_\_\_\_\_ In basement \_\_\_\_\_

Ironing: Flat iron \_\_\_\_\_ Electric iron \_\_\_\_\_ Mangle \_\_\_\_\_

Folding board \_\_\_\_\_ Board \_\_\_\_\_ Table \_\_\_\_\_

Sit to iron \_\_\_\_\_ Stand to iron \_\_\_\_\_

## IV. How is the light regulated?

Windows: Venetian blinds \_\_\_\_\_ Window shades \_\_\_\_\_ Curtains \_\_\_\_\_

Artificial light: Electricity \_\_\_\_\_ Kerosene \_\_\_\_\_

## V. What kind of large equipment is there?

Stove: Wood \_\_\_\_\_ Coal \_\_\_\_\_ Gas \_\_\_\_\_ Oil \_\_\_\_\_ Electric \_\_\_\_\_

Refrigerator: Electric \_\_\_\_\_ Gas \_\_\_\_\_ Oil \_\_\_\_\_ Ice \_\_\_\_\_ None \_\_\_\_\_

Sink: Yes \_\_\_\_\_ No \_\_\_\_\_

Freezer: Yes \_\_\_\_\_ No \_\_\_\_\_



## VI. Where are the following stored?

Everyday dishes: Kitchen\_\_\_\_ Pantry\_\_\_\_ Dining room\_\_\_\_

Cooking equipment: In stove\_\_\_\_ In kitchen cabinet\_\_\_\_ In pantry  
cabinet\_\_\_\_ Hung on wall\_\_\_\_ On open shelves\_\_\_\_ Drawers in kitchen\_\_\_\_

Staple supplies such as flour, sugar, etc.: Cabinet near stove\_\_\_\_

Cabinet near refrigerator\_\_\_\_ Cabinet near sink\_\_\_\_ Pantry\_\_\_\_

Cabinet on porch\_\_\_\_

Perishable foods as milk, vegetables, etc.: Refrigerator\_\_\_\_

Porch\_\_\_\_ Pantry\_\_\_\_ Cellar\_\_\_\_ Ice box\_\_\_\_ Spring\_\_\_\_

Dish towels and cloths: Pantry\_\_\_\_ Near stove\_\_\_\_ Near sink\_\_\_\_

Porch\_\_\_\_

Cleaning equipment: Corner of kitchen\_\_\_\_ Porch\_\_\_\_ Pantry\_\_\_\_

Cabinet in kitchen\_\_\_\_ Special closet\_\_\_\_ Behind door\_\_\_\_

Hanging\_\_\_\_ On floor\_\_\_\_

## VII. What arrangements are there for garbage care?

Care of garbage in kitchen: Covered pail\_\_\_\_ Open bucket\_\_\_\_

Emptied daily\_\_\_\_ Emptied when full\_\_\_\_

Disposal of garbage: Fed to pigs or chickens\_\_\_\_ Burned\_\_\_\_

Buried\_\_\_\_ Garbage heap\_\_\_\_ Disposal in kitchen\_\_\_\_

## VIII. Where is the work in the kitchen done?

Food preparation: On table\_\_\_\_ In sink\_\_\_\_ On cabinet near stove\_\_\_\_

On cabinet near sink\_\_\_\_ Near refrigerator\_\_\_\_ On porch\_\_\_\_

In yard\_\_\_\_

## IX. Is the kitchen screened?

Windows: Yes\_\_\_\_ No\_\_\_\_

Doors: Yes\_\_\_\_ No\_\_\_\_

## X. How are the floors and walls finished?

Floors: Wood painted \_\_\_\_\_ Unpainted \_\_\_\_\_ Concrete \_\_\_\_\_ Linoleum \_\_\_\_\_

Walls: Plaster unfinished \_\_\_\_\_ Plaster painted \_\_\_\_\_ Wallpaper \_\_\_\_\_

Wood unfinished \_\_\_\_\_ Wood stained \_\_\_\_\_ Wood painted \_\_\_\_\_ Others \_\_\_\_\_

## XI. How is the heat obtained?

Kitchen stove \_\_\_\_\_ Heater \_\_\_\_\_ Laundry heater \_\_\_\_\_ Furnace \_\_\_\_\_